

LOCKHEED AIRCRAFT CORPORAT	ION	ERING STUDY	<u> </u>	L & C - 195				
8-13-64	AFFECTS	s: w	SPO 🗌	PR	OJECT	x		
NAME OF MAJOR COMPONENT	PART OR LOWE	ST SUBASSEMBL	Y	PART NO.	& MODEL	OR TYPE		
TITLE OF PROPOSAL:  AT-400B H.F. TRANSCEIVER INSTALLATION & EVALUATION								
NATURE OF PROPOSAL:								
Concret Commo/05A  Commo/05A  See Page 2  Commo/05A  Commo/05A  Commo/05A  Commo/05A  Commo/05A								
REASON FOR PROPOSAL:								
	See Page 3		4000 B	NO POU	0.			
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ES ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED :								
CP ESTIMATED COST FOR KITS OR PARTS: See Page 3 ADDITIONAL FUNDING REQUIRED: None. SP-1923 Customer #1								
ITEMS AFFECTED BY PROPOSAL:								
SAFETY MISSION PERFORM OPERATION OF PROCEDU	JRE CHANGE WE	GHT OR TOOLS & SUPPORT LANCE EQUIPMENT	MAINTE- NANCE PROCEDURI	SERVICE LIFE	FLIGHT MANUAL	MAINTE- NANCE MANUAL		
		<b>X</b>		X	<b>X</b>	X		
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD								
SOURCE OF PARTS FOR KIT AVAILABILITY WEEKS AFTER APPROVAL								
LAC See Page 3  DISPOSITION OF SPARES AFFECTED								
None								
INITIATED BY : Approved For Release 2002/08/21 : CIA-RDP89B00980R000200170012-2  APPROVED : APPROVED : PROJECT								

## NATURE OF PROPOSAL:

Modify one test aircraft for evaluation as follows:

1187

Replace the 618T-3 transceiver and pressure box in the nose and the control panel in the cockpit with the AT-400B transceiver system, manufactured by AVCO Corp. The present 180L-3 antenna tuner is compatible with the AT-400B and is not affected. This configuration is to be tested by the contractor to verify operational ability in natural ambient conditions at altitude. It will then be delivered to the customer for further evaluation.

The AT-400B system is new and not fully tested and production models will not be available for approximately 18 months. Purchase of two systems (one to be used as a spare) which will be manufactured by the AVCO Engineering Shop is recommended to advance the test program and eventual modification of all aircraft. Components and construction of these systems will be identical to the production units. If subsequent changes arise due to further testing, AVCO will modify the two systems at no cost to the customer.

The AT-400B system offers the following advantages:

- 1. Operation at mircraft's maximum altitude.
  - 2. Operation with 28 volts DC power, which permits use of a new standby chemical battery in event aircraft power is lost. This phase will be proposed by separate ECP.
  - 3. Reduction of approximately 50% in size and 44 lbs. of weight of existing equipment. (The 44 lbs. of weight reduction includes 20 lbs. of lead which can be removed from the tail.)
  - 4. Complete solid state design except for two redundantly connected tubes provides an anticipated 730 hours of operation between failures.
  - 5. 280,000 channels at 100 cycle channel spacing vs. 28,000 channels at 1-KC channel spacing, provides greater choice of frequencies and greater possibility of selecting a clear channel.

After evaluation is complete an ECP will be submitted to furnish Service Bulletins to modify the entire fleet.

## REASON FOR PROPOSAL:

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The existing 618T-3 transceiver requires cockpit pressurization and is not operable above 38,000 feet cabin altitude and requires both DC and AC power for operation. The 618T-3 is disabled in the event of an engine flame-out, loss of cockpit pressure, loss of inverter power or loss of the DC generator.

	system requires use of the 618	
mission to the ground	facilities, these limitations	
system during a period	d of emergency when	would be most valuable.

25X1